

Specification Amendments

Please amend paragraphs [0003], [0050], and [0063] as follows:

A1 [0003] Inflammatory Irritable Bowel Syndrome (IBS) is an ailment of the intestines which is characterized by high motility of the small and large intestines to a degree that may be characterized as 'spasms'. These muscular spasms do not always move smoothly, in concert, or even in the same direction; sometimes the peristaltic motions are adverse to one another, causing intestinal bulging in the area between them. There is almost always pain and cramping involved, which may be accompanied by diarrhea or constipation. These effects have been likened to those associated with severe lactose intolerance (*Merck Manual of Diagnosis and Therapy On-Line*, "Differential Diagnosis," p.5, September 29, 2000). The spasms are not the same as the normal non-peristaltic movements of colonic smooth muscle, called haustrations, which appear to have the purpose of maximizing contact of the colonic contents with the lining of the colon walls, thus promoting absorption of nutrients. Rather, sufferers of IBS have the perception of pain and cramping as well as constipation and/or diarrhea. There have also been reports that acidic foods make the symptoms of IBS worse or may even "trigger" this ailment.

A2 [0050] This is not true about the calcium in calcium glycerophosphate. Specifically, in contrast with calcium carbonate, the calcium in CGP is instantly dissociated from the glycerophosphate (GP) moiety because the calcium is loosely ionically bound. Therefore, it is already available in the mouth, if wetted there, and is additionally available in the stomach, regardless of the pH level in the stomach. The calcium ions are rapidly and freely absorbable across the gastric lumen as well as across the small intestinal lumen immediately upon arrival at each site. Since free ionic calcium plays an absolutely essential role in muscular contraction and neural transmission (*Best and Taylor*, p. 625), it is conjectured that the 'spike' of calcium has a beneficial effect on the intestinal spasms of the IBS patient and/or the contractions of the urinary bladder. Therefore, it appears that CGP plays an alternative role to simple acid neutralization, a uniqueness which is further substantiated by the lack of reports in the literature that any calcium carbonate antacid or product is associated with symptomatic relief of diseases such as inflammatory irritable bowel disease and urinary urgency.

A3 [0063] This invention thus provides methods for utilizing calcium glycerophosphate or the ionic components thereof to alleviate, palliate and relieve the symptoms of inflammatory irritable bowel syndrome and other diseases which may be related by a common neural pathway. The

CGP is used in unique and novel ways, and also is effective in methods for reducing acidity in parts of the mammalian body and for improving smooth muscular functions. This invention thus fulfills a long-felt need in the art for a treatment for patients suffering from a wide-variety of ~~syndromes~~ syndromes or conditions which, while not life-threatening, are painful, debilitating and often overwhelming due to impairment or destruction of quality of life. Additionally, highly important from a standpoint of patient safety and with consideration of long-term use in mind, this invention utilizes safe, "GRAS", non-drug substances, none of which is alien to the mammalian body.
